REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the following remarks is respectfully requested.

Claims 14, 15, 17, and 18 are presented for examination on this application. Claims 1-13, 16, and 19 were previously cancelled without prejudice or disclaimer. Claim 14 has been amended to clarify that the first and second insulating layers (311, for example) are formed so as to cover most of a corresponding impurity diffusion layer (309, for example) except for tip portions (307, for example) as Show by FIGS 11-15, for example. This claim is further amended to emphasize that the gate electrode conductive layer (314, for example) is formed "in an overlapped relation relative" to these tip portions, as illustrated relative to the circled portion of FIG. 16, for example. Claim 16 has been amended to correct a typographical error and Claim 17 has been amended for clarity and consistency with amended Claim 14. Finally, Claim 18 has been amended to adopt an examiner suggestion. It is respectfully submitted that no issue of new matter is presented as to these claim amendments.

The outstanding Action presented an objection to the title, a rejection of Claims 17 and 18 under the second paragraph of 35 U.S.C. §112 as being indefinite, and a rejection of Claims 14, 15, 17, and 18 under 35 U.S.C. §102(e) as being anticipated by Xiang et al. (U.S. Patent No. 6,159,782, Xiang).

Turning first to the objection to the title, the title has been amended to reflect that the present invention being claimed is the semiconductor device and not the method of manufacturing it.

The rejection of Claim 17 under the second paragraph of 35 U.S.C. § 112 is made based

upon a mistaken identification of "308" as being the claimed "second insulating layer." In this regard, the reference numeral 311 on the left hand side of FIGS. 12 -15 points to the layer that is illustrative of either the "first" or the "second" claimed "insulating layer," while the reference numeral 311 pointing to the layer on the right hand side of these Figures is illustrative of the remaining other one of these claimed insulating layers. Similarly, the reference numerals 307 and 309 pointing to the impurity diffusion layer on the left side in these same Figures are illustrative of either the "first" or the "second" claimed "impurity diffusion layer," while the reference other numerals 307, 309 pointing to the impurity diffusion layer on the right hand side of these Figures are illustrative of the remaining other one of these claimed impurity diffusion layers. Accordingly, it is clear that the "third impurity diffusion layer" of Claim 17 that corresponds to a tip portion on the left and right is then the left and right impurity diffusion layer portions 309, while the "fourth impurity diffusion layer" of Claim 17is then the deeper portion 309 that provides the claimed "deeper junction in the semiconductor substrate than the third impurity diffusion layer."

Claim 18 has been amended to adopt the suggestion at page 3 of the outstanding Action as to the use of "adjacent to" instead of "beneath."

In light of the above, it is respectfully submitted that the rejection of Claims 17 and 18 under the second paragraph of 35 U.S.C. §112 should be withdrawn.

Before considering the rejection of Claims 14, 15, 17, and 18 under 35 U.S.C. §102(e) as being anticipated by Xiang, it is believed that a brief summary of the subject matter of amended independent Claim 14 would be helpful. In this regard, Claim 14 requires, *inter alia*, first and second insulating layers to be formed on respective first and second impurity diffusion

layers so as to cover most of these respective first and second impurity diffusion portions except for the recited tip portions. In addition, these tip portions must be overlapped by the recited gate electrode conductive layer.

The rejection of Claims 14, 15, 17, and 18 under 35 U.S.C. §102(e) as being anticipated by Xiang is respectfully traversed.

It is submitted that the outstanding Action is interpreting the drawings of Xiang to be accurate as to scale and the relative positioning of the small unlabeled protruding portions of the source (156) and drain (154) regions and the final gate electrode. However, these protrusions are not described as to any method of formation that could provide them in a manner that their dimensions are independent of the dimensions of the sidewalls 168 in the "B" FIGS. (1-12) of Xiang. These observations also apply to the "A" figure showings of similar protrusions as to source region 106 and drain region 104 that are shown to be independent of sidewalls 120. Furthermore, Xiang specifically points out (at col. 4, lines 46-47) that "[t]he figures referred to herein are drawn for clarity of illustration and are not necessarily drawn to scale" (emphasis added).

Taking the lack of disclosure as to the formation of these unlabeled protrusions and the disclosure of background art FIGS. 1-8 and the showings of FIGS. 1-10 of Gardner et al. (U.S. Patent No. 6,200,865, of record) as to using sidewalls for forming such protrusion into account, it is submitted to be clear that the sidewalls 120 and 168 of Xiang exist for the purpose of forming the shallow protruding portions of the source and drain regions beneath these sidewalls. Clearly, there is no teaching in Xiang as to some other use for sidewalls 120 and 168 and no teaching of how to make the shallow protrusions in a manner that they could actually extend

beneath the final gate electrodes 232 or 234 as seemingly shown by FIGS 12 A and 12 B.

Furthermore, and even absent the above-noted statement of Xiang, it is well established that patent drawings are not to be relied upon as if they were actually drawn to scale without evidence indicating that they are so drawn. See *In re Wilson*, 136 USPQ188, 192, (CCPA 1963) specifically pointing out that because "[p]atent drawings are not working drawings," arguments predicated on portions of drawings "obviously never intended to show the dimensions of anything" are without merit. Thus, the reproduction of FIG. 12 B with labeled 3rd and 4th impurity diffusion layers at page 4 of the outstanding Action is being improperly relied upon to suggest actual overlap of the gates and the labeled "3rd" portions is somehow taught by the Xiang drawing that is not to scale.

As noted above, the figures of Xiang are only presented "for clarity of illustration." Thus, these drawings are at best ambiguous as to the exact relative placement of the sidewalls 120 and 168, the final gate electrodes 232 or 234, and the shallow protruding portions of the source (106, 156) and drain (104, 154) impurity diffusion layers. It is well established that such ambiguous showings subject to different interpretations cannot be relied upon to establish anticipation. *See, In re Turlay*, 304 F.2d 893, 899, 134 USPQ 355, 360 (CCPA 1962). Also note the requirement that references provide clear and definite disclosures as to the features therein that are being relied upon. See *In re Hughes*, 145 USPQ 467, 471 (CCPA 1965) and *In re Moreton*, 129 USPQ 227, 230 (CCPA 1961).

Applicants respectfully submit that the artisan would understand that FIGS 1-12 are not intended to show the actual positions of the Xiang shallow source (106, 156) or drain (104,154) protruding portions of the source (106, 156) and drain (104, 154) impurity diffusion layers

relative to either the sidewalls 120 and 168 or the final gate electrodes 232 or 234. Further, it is respectfully submitted that if these shallow protruding portions of the source (106, 156) and drain (104, 154) impurity diffusion layers were accurately depicted as to their exact locations relative to either the sidewalls 120 and 168 used to form them or the final gate electrodes 232 or 234 that are provided after their formation, the showing would match background art FIG. 8 of this application and would be subject to the problem that the present invention seeks to overcome.

In addition, as Claims 15, 17, and 18 all ultimately depend on Claim 14, these dependent claims patentably distinguish over Xiang for at least the same reasons parent independent Claim 14 does. Moreover, each of these dependent Claims 15, 17, and 18 adds further features to the subject matter of parent independent Claim 14 that are further not reasonably taught or fairly suggested by Xiang. Therefore, dependent Claims 15, 17, and 18 patentably distinguish over Xiang for this reason as well.

Accordingly, as no further issues are believed to remain outstanding in the present application, it is believed that this application is clearly in condition for formal allowance and an early and favorable action to this effect is earnestly and respectfully requested.

Respectfully submitted,

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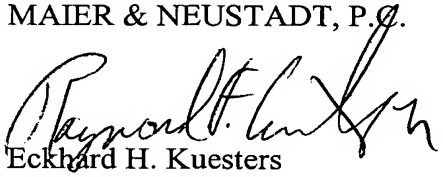

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